

SEQUENCE LISTING

<110> CHAN, JOHN
BAYNES, BRIAN
ZHANG, SHENGSHENG

<120> METHODS OF ENGINEERING SPATIALLY CONSERVED MOTIFS IN POLYPEPTIDES

<130> COTH-PO1-002

<140> 10/676,873

<141> 2003-09-30

<150> 60/414,688

<151> 2002-09-30

<160> 4

<170> PatentIn version 3.2

<210> 1

<211> 474

<212> DNA

<213> TNF alpha chain b mutation

<400> 1

```
gtcagatcat cttctcgaac cccgagtgac aagcctgtag cccatgttgt agcaaaccct      60
caagctgagg ggcagctcca gtggctgaac cgccgggcca atgccctcct ggccaatggc      120
gtggagctga gagataacca gctggtggtg ccatcagagg gcctgtacct catctactcc      180
caggtcctct tcaagggcca aggctgcccc tccacccatg tgctcctcac ccacaccatc      240
agccgcatcg ccgtctccta ccagaccaag gtcaacctcc tctctgccat caagagcccc      300
tgccagaggg agaccccaga gggggctgag gccaagccct ggtatgagcc catcgatctg      360
ggaggggtct tccagctgga gaagggtgac cgactcagcg ctgagatcaa tcggcccgac      420
tatctcgact ttgccgagtc tgggcaggtc tactttggga tcattgccct gtga          474
```

<210> 2

<211> 157

<212> PRT

<213> TNF alpha protein

<400> 2

```
Val Arg Ser Ser Ser Arg Thr Pro Ser Asp Lys Pro Val Ala Gly Val
1              5              10              15
```

```
Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg
20              25              30
```

```
Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu
35              40              45
```

Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu Phe
50 55 60

Lys Gly Gln Gly Cys Pro Ser Thr His Val Leu Leu Thr His Thr Ile
65 70 75 80

Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser Ala
85 90 95

Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala Lys
100 105 110

Pro Gln Tyr Glu Pro Ile Asp Leu Gly Gly Val Phe Gln Leu Glu Lys
115 120 125

Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg Pro Asp Tyr Leu Leu Phe
130 135 140

Ala Glu Ser Gly Gln Val Tyr Phe Gly Ile Ile Ala Leu
145 150 155

<210> 3
<211> 474
<212> DNA
<213> TNF alpha chain c mutation

<400> 3
gtcagatcat cttctcgaac cccgagtgac aagcctgtag cccatgttgt agcaaaccct 60
caagctgagg ggcagctcca gtggctgaac cgccgggcca atgccctcct ggccaatggc 120
gtggagctga gagataacca gctggtggtg ccatcagagg gcctgtacct catcagttcc 180
caggteectct tcaagggcca aggctgcccc tccacccatg tgctcctcac ccacaccatc 240
agccgcatcg ccgtctccta ccagaccaag gtcaacctcc tctctgccat caagagcccc 300
tgccagaggg agaccccaga gggggctgag gccaagccct ggtatgagcc catccatctg 360
ggaggggtct tccagctgga gaagggtgac cgactcagcg ctgagatcaa tcggccccgac 420
tatctcgact ttgccgagtc tgggcaggtc tactttggga tcattgccct gtga 474

<210> 4
<211> 157
<212> PRT
<213> TNF alpha protein sequence chain c

<400> 4

